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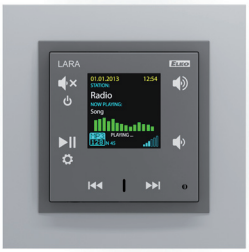


LARA

User Guide for Lara / Internet radio

4871, 4871, 4922, 4925, 4924, 4923 -02-021/2014 Rev.:0

Before you begin!

Congratulations on purchasing your LARA device (Internet radio in a switch).
The instruction manual provides information on installing and operating the device. The instruction manual is always a part of the supply. Only perform installation after becoming thoroughly familiar with this User Guide and device functions. Problem-free function of the device also depends on the way it was shipped, stored and handled. If you notice any signs of damage, deformation, malfunction or a missing part, do not install this product and return it to the point of sale. At the end of its service life, the product and its parts must be treated as electronic waste. Before starting the installation, make sure that all wires and connected parts are not under voltage. When assembling and performing maintenance, you must uphold safety regulations, standards, directives and special provisions for working with electrical equipment.
For successful installation, you will need: LARA Internet radio, a set of speakers, POE power source, UTP cable with RJ45 connector, cable for speakers, PC with the application LARA Configurator.
To protect yourself from electrical shock, connect only safety extra-low voltage (SELV) circuits. For example power supplies PoE (SELV) or LAN circuits (SELV circuits). Other power supplies (ELV) and WAN circuits (TNV circuits) should not be connected directly to product.
Warning: some LAN and WAN ports use the same connectors RJ-45 so be careful when connecting a product.

Charakteristic

- A music and Internet radio player - all in the dimension of a switch and a luxurious LOGUS90 design.
- When connecting to the Internet, LARA can play a stream created from a file on an NAS server (network storage). You can also connect an external music source (iPhone, MP3 player, telephone) to the audio input via 3.5mm jack.
- Control is performed by simply touching the device front panel or by infrared remote control, which is included in the product packaging.
- Configuring the device settings is possible using the simple menu controlled from the front cover of the device, with configuration via your PC using the SW LARA Configurator.
- LARA has its own built-in amplifier 2x10W, which provides sufficient output for Hi-Fi speakers. For quality listening in the kitchen or bathroom, we recommend the LOGUS90 21581, which can be installed into a triple frame together with LARA.
- Using the Internet radio, you gain easy access to countless radio broadcasting stations from the entire world without needing a computer.
- Complies with standards IEEE 802.3u (100BASE-Tx).
- Automatic cable crossing detection of Ethernet cable - MDIX
- 100Base Ethernet, auto-detection
- Powering by PoE – maximum voltage 27V / 1000mA max. consumption.
- Firmware update via the SW Configurator.
- Design LARA in Logus^{90}.

Accessories

Power / network elements

PoE adapter (to power 1x LARA)

PoE adapter with WiFi bridge (to power 1x LARA)

PoE switch with 5 ports (to power 5x LARA)

PoE switch with 8 ports (to power 8x LARA)

Technické parametry	LARA
INTERNET RADIO	
Supported data transfer formats:	mp3, ogg, acc
CONTROL/SETTINGS	
Front panel:	touchscreen buttons
Remote control:	IR remote control (part of supply)
Communication Ethernet:	via PC setting up and communicating SW LARA configurator
Button RESET:	restart product / reset product to factory settings
INTERFACE ETHERNET	
Communications interface:	0/100 Mbps
Connector:	RJ45
Max. cable length UTP with power:	50m
DISPLAY	
Type:	color OLED
Resolution:	128x128 pixels
Visible surface:	26 x 26 mm
POWER SUPPLY PARAMETERS	
Supply:	POE 24 V DC/1.25 A
Min. input:	1.4 W
Max. input:	26W (peak at maximum playback performance)
AMPLIFIER PARAMETERS	
Amplifier:	stereophonic class D with digital output control
Max. amplifier output	2 x10 W/8 Ohm
INPUTS / OUTPUTS	
Audio input:	3.5 stereo jack
Audio output 1:	terminals LINE OUT (used for external amplifier)*
Audio output 2:	terminals OUT L/OUT R (speaker output from int. amplifier)
CONNECTION	
Terminal block:	0.5 - 1 mm2 (audio outputs)
OTHER DATA	
Working temperature:	0 .. + 55 °C
Overvoltage category:	IP20
Pollution degree:	II.
Installation:	2
Dimensions:	in an installation box
Frame - plastic:	85 x 85 x 46 mm
Frame - metal, glass, wood, granite:	94 x 94 x 46 mm
	87 g (plastic frame)

* The cable from the LINE OUT terminals must be shielded, max. length should not exceed 5m.

IP Intercoms

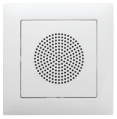
3x 2buttons
1 camera

3x 2 buttons
1 keyboard
1 camera

3x 2 buttons
1 keyboard
1 camera
1 display

Complete range of IP Intercoms 2N Helios can be found on www.2n.cz

Speaker 2" 32 Ohm
with mounting into an installation box



Cover colors:
White
Ivory
Ice
Pearl
Grey
Alluminium

Speaker 5" 32 Ohm
- with ceiling mounted — White / Ivory

Speaker 5" 16 Ohm
- with ceiling mounted — White / Ivory

Speaker 5" 8 Ohm
- with ceiling mounted — White / Ivory

2 way speaker 32 Ohm
- mounting on a wall or ceiling — White

2 way speaker 16 Ohm
- mounting on a wall or ceiling — White

2 way speaker 8 Ohm
- mounting on a wall or ceiling — White

dimension (mm): 270 x 183 x 37

Square 2-way speaker 32 Ohm
- with ceiling mounting — White / Ivory

Square 2-way speaker 16 Ohm
- with ceiling mounting — Wtite / Ivory

Square 2-way speaker 8 Ohm
- with ceiling mounting — White / Ivory

dimension (mm): 204 x 204 x 92

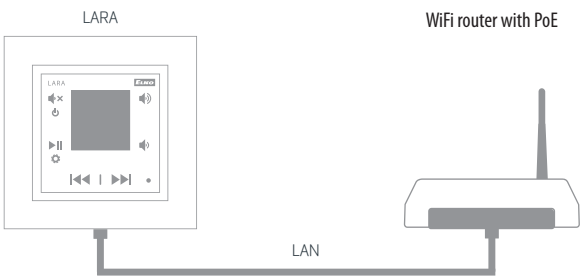
NAS:
Synology DiskStation DS213j
- the storage of data (music, movies, photos) connected to the LAN
- 2.000 gigabytes storage size
- enables intelligent management and backup

Hardware installation:

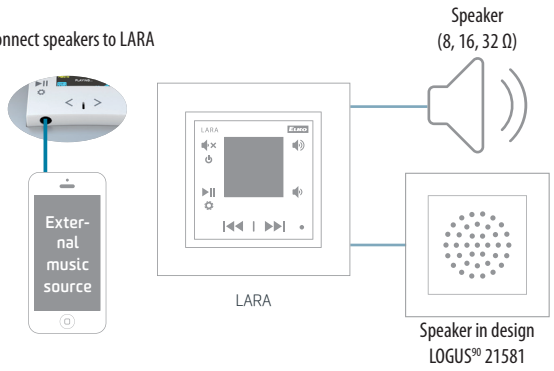
Requirements for installation environment:
The product cannot be placed where it is exposed to moisture or excessive heat.
- Place the product at a spot where it can be connected to the Ethernet network. The Ethernet cable with Poe supply should have a short a distance as possible between the player and Poe source due to voltage drop occurring as the distance grows. Also use quality cables and connectors of a renowned brand for installation.
- Never install the player without its installation box, and it is prohibited to mount it directly into the wall, e.g. into drywall partitions, where the device chassis would be directly wrapped in insulation material.
- Distributing individual elements of the installation must be defined prior to actual installation, prior to interference (cutting) into walls or installation of boxes.

PoE (Power over Ethernet) is fed along a data network cable, without the need to provide power to the machine by another separate cable.

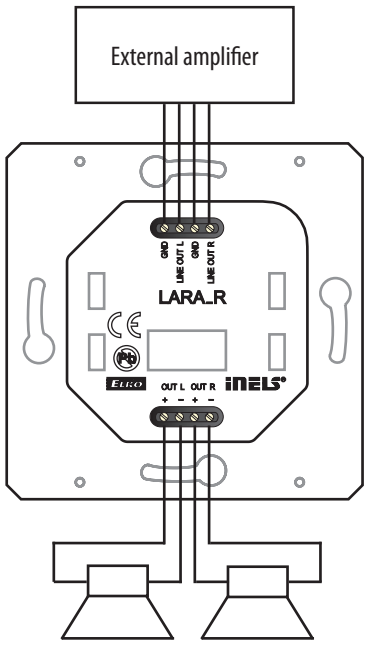
Connect LARA and switch



Connect speakers to LARA



Setting of LARA through LARA configurator



Description of installation:
Install the bottom part of the LARA player into the box KU, we recommend a box that enables mounting devices with greater depth. Connect the speaker cables into the terminals OUT L +/- OUT R +/-. You can connect the input to an external amplifier into the terminals LINE OUT L, LINE OUT R, GND. Snap the Ethernet cable into the RJ45 connector. Secure the device using the installation box screws. Snap the upper part of the player into the design frame LOGUS 90. Snap the upper part of the player with the frame to the lower part of the player. Connection of these two parts must be performed with care to avoid damaging the connectors. Connect the other end of the Ethernet cable to the POE switch or via the POE adapter to the Wi-Fi router, switch. After providing power, the display shows the system information, then after around five seconds the main display of the player.

Output of speakers, audio cables

Speaker	output (W)
2x 4 ohm	2x 20 W
2x 8 ohm	2x 10 W
2x 16 ohm	2x 5 W
2x 32 ohm	2x 2,5 W

When installing the speakers, use quality audio cables with minimum diameter 0.5 mm, with maximum length of 30 m. It is best to have the same cable length for the right and left channels.

Description of player

Reset button - In the opening (in the upper part of the cover), for pressing use a thin object, i.e. a paper clip

Short press (sound from speakers on/off);
Long press switches off the device

Short press (play/stop);
Long press input to menu

A short press while play is stopped lets you scroll in the list of assigned Radios;
A long press of both arrows - button lock

Short press
- Volume up

Short press
- Volume down

IR sensor of remote control

Long press

Short press

Repeated pressing
Return to the main screen by repeatedly pressing on the icon

Configuration, putting into operation

1. Selecting a language

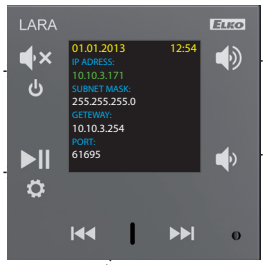
2. Setting up a network

Exiting the menu after performed changes

Locking the change

Opening the change

Moving in numerical values



Selection of IP address settings; Subnet mask; Firewall change in numerical value to +

Selection of IP address settings; Subnet mask; Firewall change in numerical value to -

LAN parameters:
- For changing the network connection parameters of the LARA player, write in the text field the new IP address, subnet mask and Epsnet port.
- IP address - enter a new address in decimal format separated by periods (default setting: 192.168.1.10).
- Subnet mask - address code determining the size of the network: The value 255.255.255.0 is commonly used for the subnet mask.
- Firewall: default settings of local network firewall.

3. Audio output settings

note: selection of the PA output to speakers connected to terminals OUT L, OUT R
selection Output link to terminals Line OUT L, Line OUT R designed for an external amplifier
selection PA+Link output to both terminals simultaneously

4. Settings of the active illumination time of the OLED display

Concerns how long the device display stays illuminated; when this time is up the display shuts off, and reactivates upon touching any button.

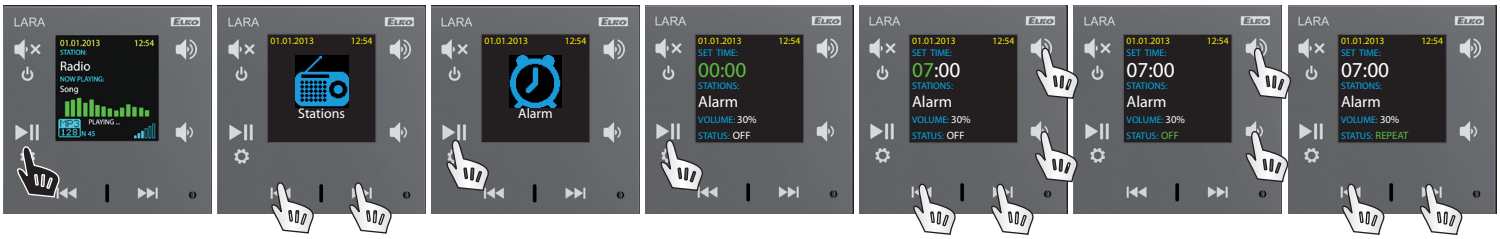
5. Device restart

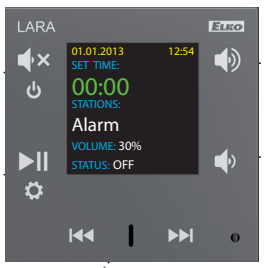
Via the settings menu or by shortly pressing (around 1s) the RESET button located on the device cover in the status when the product is connected to the supply voltage, the product will restart. This restart neither changes nor deletes settings.
RESET to factory settings occurs after pressing and holding the RESET button for 1 min. and 10s. This restart returns the product to its factory settings, i.e. the IP address is set to 192.168.1.10, and stored stations are erased

6. Activation/deactivation of input AUX IN

The input AUX IN is used to connect external audio devices such as a mobile phone, mp3 player and others. A 3.5 mm jack provides connection. In this mode, the player functions as an audio amplifier. When activating the input, the volume on the player is set (fixed) at 100%. Volume can thus be controlled only on the connected external audio device

7. Alarm setting





Return/
Save time settings

Opening change at the
time settings

Data settings/
Switching hours-minutes at the time settings

Scroll up in the menu/
Setting the hour-minute

Scroll down in the menu/
Setting the hour-minute

Button lock:

A long press of both arrows locks the touchpad buttons. Locking is signaled by a symbol on the display.
The device is unlocked by the same process.

Options of design of the LARA player

Description	Radio	Music	Videophone	Intercom	Audio zone
LARA radio					
LARA home videophone					
LARA iNELS multimedia					

Configuring the device LARA Radio:

Configuring the LARA network music player is performed using the software („SW") LARA Configurator via Ethernet connection.
SW enables setting the basic network parameters, a change in login data, update of firmware („FW") of the device, and editing the list of web radios.

Configuring the device LARA Radio using SW LARA Configurator:

The configuration SW can be freely downloaded from the website http://www.elkoep.cz/ke-stazeni/software/
Using the configuration SW (LARA Configurator), you can:

- set the login data
- set the network connection parameters
- set the parameters for automatic synchronization of time
- edit the Internet radios list
- set the IMM audio zone parameters
- update FW of the LARA Radio device
- remotely control the LARA Radio device

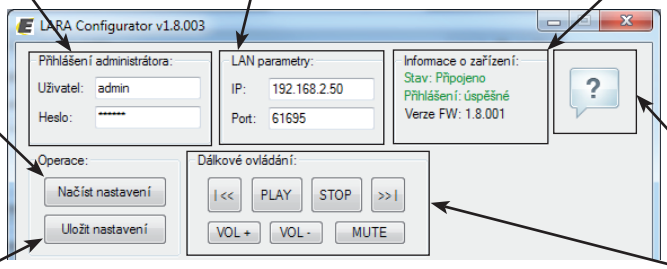
The configuration SW communicates with the LARA Radio device by means of the Ethernet network. This SW can be run simply without installation in operating systems Microsoft Windows XP, Windows 7 and Windows 8. A condition to running the application is support of Microsoft .NET Framework 4 or its possible installation

Administrator login:
In the login window dialog box, enter the set administrator login data. The factory settings of this data are the user: „admin" and the password: „elkoep". If the entered data is invalid, it will not possible to continue in reading the LARA Radio device settings

Read settings:
The button „Read settings" serves to read all settings stored in the device LARA Radio. Reading occurs only in the event of successful connection and login.

Save settings:
The button „Save settings" is used to save the complete settings stored in the LARA Radio device.

LAN parameters:
You must enter in the dialog box the IP address and number of network port of the connected LARA Radio device. These parameters can be checked on the device display in the menu Settings -> LAN



About the device:
The window „About the device" indicates the connection status, login and version of SW and HW in the LARA Radio device. The connection status is not dependent on successful login. The „Connected!" status occurs under the condition of a correct network connection, login „Successful!" occurs after login data is correctly entered.

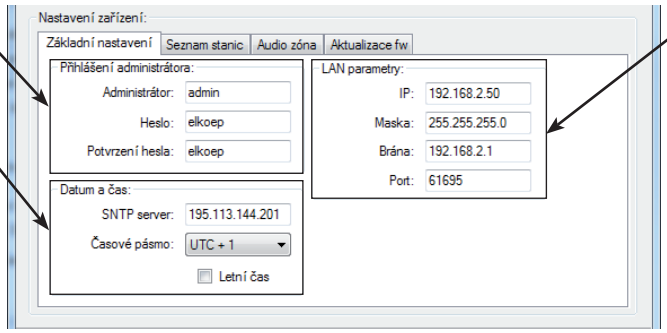
About the device:
Information about the device and program including hypertext links to the product manual and catalog list.

Remote control:
By using the remote control in the LARA Configurator program, you can simply and quickly check the function of your configured device.

Device settings:

Administrator login:
To change the login data, enter the new login name and password into the text fields. You must confirm the password.

Date and time:
- SNTP server: if needed, enter the IP address of another time server supporting the SNTP protocol.
- Time zone: Select the time zone in the place of installation of the LARA Radio device for correct display of time.
- You can switch from winter to summer time using the control element „Summer time"



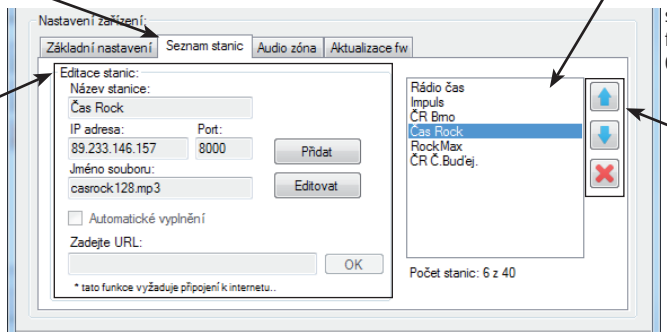
LAN parameters:
- To change the network connection parameters of the LARA device, enter in the text fields the new IP address, subnet mask and Epsnet port.
- IP address - enter a new device IP address in decimal format separated by periods (default setting: 192.168.1.10).
- Subnet mask: default value 255.255.255.0.
- Firewall: local network firewall settings.

Port: use the factory preset port 61695. In case of problems with the firewall, we recommend choosing ports in a range of 49152 to 65535.

List of stations:

List of stations:
The tab „List of stations" is used for complete management of the list of Internet radio stations stored in the LARA device

Edit stations*:
In the section Edit stations, you can use the buttons to add new or modify existing stations in the list



List of stations:
It is possible to store up to 40 presets into the list for music network streams. LARA Radio in its current version supports streams in the formats SHOUTcast and Icecast with audio formats MP3, AAC and OGG, which are used in most cases of Internet broadcasting.

Control elements:
After successful reading of stations along with overall device settings, you can browse the list of streams and change their order. For sorting and removing items from the list, use the relevant control elements on the right side of the list.

In the section Station editing, use the buttons to add new or modify existing stations in the list.
- To add a new station, you must know its source address, which is usually given in a variety of forms:
- http://www.jmenoserveru.cz:cisloportu/nazevsouboru
- http://135.111.258.333:8000/nazevsouboru
- http://www.jmenoserveru.cz:8000/nazevsouboru
- http://www.jmenoserveru.cz:8000
- http://135.111.258.333:8000
- http://www.jmenoserveru.cz/nazevsouboru

After pressing the „add" button, you begin entering the stream parameters into the relevant fields:
Manual completion:
- Name of station: name of preselection displayed on the OLED display.
- IP address: server address where the stream is being broadcast. The server address must be entered in decimal format separated by periods. If it is an address with a domain name (www.jmenoserveru.cz), use the automatic completion option, see below.
- Port number: this is entered as a number in decimal format.

(example 1: www.jmenoserveru.cz:8000/hudba.mp3 - port number = 8000)
If this port number is not listed in the address, enter port number 80

(example 2: www.jmenoserveru.cz/hudba.mp3 - port no. = 80)
- File name: not always used and not a required parameter for storing the station.

(example 3: www.jmenoserveru.cz:8000/hudba.mp3 - file name = hudba.mp3)

(example 4: www.jmenoserveru.cz:8000 - do not enter file name)
- After entering all necessary data, store the station in the list by pressing „Save".

Note: If the file name has the extension *.m3u, it is not the music stream address , but a playlist address containing the address (or multiple addresses) in the music stream. In this case, use the option of automatic completion.
Automatic completion:
- For most addresses, it is possible to use the function of automatic completion by the following steps:
- Enter any name of a station.
- Click the option „Automatic completion" and after entering the address, confirm by pressing „OK".
- An information message will inform you of the result of the automatic processing of the link.
- Enter the station in the list by pressing „Save".

Note: The automatic completion function requires an active Internet connection.
Important note: Store the prepared list of stations into the device along with settings by pressing „Save". Until you do so, the list is elaborated and stored only in the SW memory!

Audio zone:

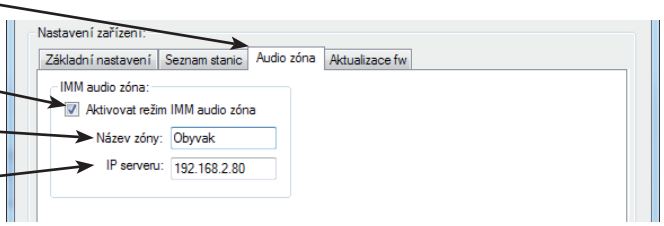
Audio zone:

The tab Audio zone is used to activate and set the IMM audio zone function

The control element enables activation and deactivation of the IMM audio zone function

Name of zone: displayed in the IMM environment

IP server: enter the IP address of the IMM server in decimal format separated by periods



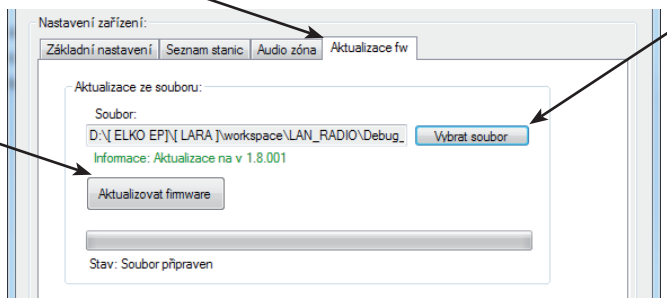
Updating FW:

Updating FW:

To update the FW in the LARA Radio device, it is first necessary to download the update file with the extension „*.lfw“ from the address http://www.elkoep.cz/ke-stazeni/software/

Updating FW:

Pressing the button starts the update, the progress of which is illustrated graphically. Reading a damaged or invalid file prevents the following updating steps, and it is necessary to repeat the process with the correct update file



Select file:

Pressing „Select file“ brings up a dialog window for searching and selecting the update file.
After opening the selected file, its contents are checked, and the user is then informed of the result. If the correct file has been selected, the FW version number is displayed.

Troubleshooting

- The product is not communicating, the display is not illuminated
Solution: Check the power supply: Check to see if the product is connected to the power supply and if the RJ45 connector is connected to the product. Check if the power source Poe is connected to the network.
- The product is illuminated but the radio does not play.
Solution: Check the Ethernet network connection. Disconnect and reconnect the RJ45 Ethernet connector. After repeated connection, the product displays system information; if within five seconds the player display does not appear, there must be some network connection issues, check the network settings.
- Restart the product.
If there is no problem with the above-mentioned points and all settings are correctly set, perform a restart by briefly pressing the RESET button or by disconnecting and reconnecting the power supply.
- Interrupted playing, frequent reading of the radio.
Probably insufficient Internet connection speed.

Maintaining the device

The device front panel and frame can be cleaned using a dry or slightly moistened rag with a mild soap solution. Avoid use of other cleaning agents

The company ELKO EP, as the manufacturer, is entitled to make technical modifications to the product, in the technical specification and product manual, without prior notification. ELKO EP bears no liability for possible incompleteness and mistakes in this document.